

ABSTRACT OF THE DISCLOSURE

The high temperature secondary battery based energy storage and power compensation system is so formed that electric power supply system, electric load, and electric energy storage system including a high temperature secondary battery and a power conversion system, are electrically connected with one another. When operating normally, electric power is supplied from the electric power supply system to the electric load, while the electric energy storage system operates to effect peak shaving running and load leveling running. A high speed switch is provided between the electric power supply system and the electric energy storage system, so that when a voltage sag or a service interruption occurs while the electric power is being supplied from the electric power supply system, the voltage sag is immediately detected and the circuit is immediately shut off, an electric power is immediately supplied from the electric energy storage system to the electric load so as to compensate for the voltage sag or the service interruption.